# GOVERNMENT OF INDIA
# NEW AND RENEWABLE ENERGY
# LOK SABHA

STARRED QUESTION NO:338
ANSWERED ON:11.12.2009
SOLAR LIGHTING SYSTEMS IN RURAL AREAS
Yadav Shri Hukamdeo Narayan

**Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:**

(a) the details of the schemes/ programmes formulated by the Government to provide lighting systems through solar energy in the rural areas of the country;

(b) the number of such systems installed in the country during the last three years and the current year and the number out of them functioning/non-functioning, State-wise;

(c) whether any review has been conducted by the Government in this regard;

(d) if so, the details thereof;

(e) whether the Government has conducted/proposes to conduct any enquiry regarding credibility of the companies supplying these lighting systems in the rural areas of the country; and

(f) if so, the details thereof?

## Answer

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH)

(a),(b),(c),(d),(e)&(f): A Statement is laid on the Table of the House.

STATEMENT

Statement referred to in reply to the Lok Sabha Starred Question No. 338 for 11th December, 2009 regarding Solar Lighting Systems in Rural Areas.

(a): The Ministry provides following central financial assistance (CFA) for distribution/ installation of solar photovoltaic (SPV) lighting systems in rural areas:

| SPV Lighting System | CFA (In Rs.) Special Category States & UT Islands | CFA (In Rs.) Other States/UTs |
|---|---|---|
| Solar lantern for beneficiaries living in Unelectrified villages and hamlets | 2400 | - |
| Solar lantern for a girl child living in Unelectrified villages and hamlets & Studying in Class IX to XII | Full Cost | - |
| SPV Home lighting system | | |
| - 18 watt peak PV module capacity | 4500 | 2500 |
| - 37-74 watt peak PV module capacity | 8660 | 4800 |
| Street lighting Systems (PV module capacity 74 watt peak. | 17300 | 9600 |

In addition, under the Remote Village Electrification Programme of the Ministry for un- electrified census villages / hamlets - CFA up to 90% of the cost of SPV lighting systems is supported by the Ministry. A maximum CFA of Rs.18,000/- per household is provided

under this programme.

(b),(c)&(d): The State-wise details of SPV lighting systems installed during the last three years and current year up to 30.11.2009 under the SPV Programme of the Ministry are given in the Table. For assessing the functionality of the solar lighting systems installed in the field, the Ministry engaged the Integrated Research and Action for Development (IRADe), New Delhi; National Council of Applied Economic Research (NCAER), New Delhi and National Productivity Council (NPC), New Delhi to carry out studies during 2007-08 and 2008-09 for the systems installed in the country during the 10th Plan period. These studies covered 9908 home lighting systems, 615 street lights, 91 solar lanterns and 8 water pumping systems installed in villages and hamlets in Assam, Gujarat, Haryana, Jharkhand, Karnataka, Manipur, Meghalaya, Rajasthan, Uttarakhand and West Bengal under the Ministry's programmes. The functionality varied from 70% for street lighting systems to 100% for SPV pumping systems. The functionality level for solar home lighting systems varied from 82% in West Bengal to 100% in Assam. The functionality of solar lanterns was found to be 74%.

(e)&(f): The SPV System manufacturers are required to submit details of their company and samples of their systems for testing and certification from any of the test centers authorized by the Ministry i.e. Solar Energy Centre (SEC), Gurgaon, Haryana; Electronics Regional Test Laboratory (ERTL), Kolkata and Central Power Research Institute (CPRI), Bangalore for the performance of the systems under Standard Test Conditions. The programme implementing agencies also get their systems collected from the field and tested in these centres, occasionally.

Table

Table referred to in reply to Parts (b),(c)&(d) of the Starred Question No.338 for 11th December, 2009 regarding Solar Lighting Systems in Rural Areas.

State-wise SPV Lighting Systems distributed / installed under the Ministry's Solar Photovoltaic (SPV) Programme during 2006-07,2007-08,2008-09 and 2009-10 (up to 30.11.2009)

| S.No. | State/UT | SPV lighting systems (Nos.) | | |
|---|---|---|---|---|
| | | Street lighting Systems | Home lighting Systems | Lanterns |
| 1 | Andhra Pradesh | 181 | 395 | 0 |
| 2 | Arunanchal Pradesh | 17 | 3000 | 9000 |
| 3 | Assam | 0 | 3083 | 670 |
| 4 | Bihar | 0 | 1102 | 16352 |
| 5 | Chhattisgarh | 0 | 164 | 0 |
| 6 | Goa | 252 | 155 | 493 |
| 7 | Gujarat | 0 | 4279 | 0 |
| 8 | Haryana | 6706 | 13420 | 13233 |
| 9 | Himachal Pradesh | 1200 | 3892 | 2273 |
| 10 | Jammu & Kashmir | 5107 | 452 | 18807 |
| 11 | Jharkhand | 237 | 3933 | 0 |
| 12 | Karnataka | 1052 | 15817 | 0 |
| 13 | Kerala | 0 | 13647 | 0 |
| 14 | Madhya Pradesh | 208 | 1443 | 845 |
| 15 | Maharashtra | 0 | 0 | 57200 |
| 16 | Manipur | 0 | 1200 | 0 |
| 17 | Meghalaya | 680 | 6300 | 20000 |
| 18 | Mizoram | 116 | 800 | 0 |
| 19 | Nagaland | 0 | 577 | 6150 |
| 20 | Orissa | 50 | 812 | 0 |
| 21 | Punjab | 2200 | 5440 | 0 |
| 22 | Rajasthan | 59 | 21963 | 0 |
| 23 | Sikkim | 60 | 0 | 1750 |
| 24 | Tamil Nadu | 400 | 1086 | 0 |
| 25 | Tripura | 13 | 1462 | 21555 |
| 26 | Uttar Pradesh | 3167 | 8101 | 0 |
| 27 | Uttarakhand | 3750 | 54327 | 36996 |
| 28 | West Bengal | 753 | 54962 | 0 |
| 29 | Puducherry | 355 | 12 | 0 |
| 30 | Others | 3150 | 2915 | 97600 |
| | Total | 29713 | 224739 | 302924 |